



# *Proposed Amendments*

## Dangerous Waste Regulations

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### Chapter 173-303 WAC

Comments Due: September 10, 2004

Submit comments to Chipper Hervieux at:

HWTR Program  
P.O. Box 47600  
Olympia, WA 98504  
Fax (360) 407-6715  
e-mail [pher461@ecy.wa.gov](mailto:pher461@ecy.wa.gov)

Washington State Department of Ecology  
Hazardous Waste and Toxics Reduction Program



**Proposed Amendments  
Dangerous Waste Regulations Chapter 173-303 WAC  
July 2004**

This document contains preamble explanations for the proposed amendments to the Dangerous Waste Regulations, Chapter 173-303 WAC. The proposed rule language itself is in a separate document, as are the changes to *Chemical Testing Methods for Designating Dangerous Waste*. Most of the proposed amendments were made public for review and comment a few months ago. Those comments were considered and some rule language changes were made as a result. In addition, the following explanations for the rule changes have been modified to address some of the questions and comments. Your comments on the proposed amendments will be taken into consideration prior to adoption, which is scheduled for later this year.

A suggested format for submitting your written comments follows.

Submit written comments on the proposed amendments by September 10, 2004 to:

Chipper Hervieux  
HWTR Program  
P.O. Box 47600, Olympia, WA 98504  
Fax: (360) 407-6715  
E-mail: [pher461@ecy.wa.gov](mailto:pher461@ecy.wa.gov).

Comments on *Chemical Testing Methods for Designating Dangerous Waste* should be submitted by September 10, 2004 to:

Alex Stone  
Department of Ecology  
Hazardous Waste and Toxics Reduction Program- SWRO  
PO Box 47775  
Olympia, WA 98504  
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Additions to the rule proposal since the earlier draft include language to extend closure and financial requirements to recyclers and used oil processors (the Hazardous Waste Facilities Initiative), Performance Track Facility accumulation changes, and replacement of the Uniform Fire Code with the International Fire Code.

If you have questions about these changes or the rulemaking process, call Chipper Hervieux at (360) 407-6756.

**Dangerous Waste Regulations Chapter 173-303 WAC  
Draft Amendments – March 2004  
Comment Form**

**First and Last Name:**

**Organization or Affiliation:**

**Address:**

Indicate if your comment is on the federal requirements \_\_\_\_\_ or state requirements \_\_\_\_\_

Section # \_\_\_\_\_ Page # \_\_\_\_\_ Citation # \_\_\_\_\_

Please state your comment, question, or recommendation. Explain your concern. How will your recommendation improve the proposed rule amendments?

Please provide specific language for your recommended change or addition.

**Signature:** \_\_\_\_\_

## INSTRUCTIONS FOR USE OF COMMENT FORM

The purpose of this form is to increase the efficiency and effectiveness with which Ecology evaluates and incorporates comments on regulation amendments. A standard format will assist us in sorting and evaluating the many comments that we receive on regulations of interest. We encourage commenters to propose language that reflects the substance of their comments(s).

1. Please complete one of these forms for each comment you are making. Please, only one comment per form (typographical errors can be bunched on one form).
2. Make your comments clear and brief. It will help us understand and evaluate your comments.
3. If you can recommend language and reasons why it will improve the regulation, it will increase the likelihood of acceptance.
4. Please sign each comment form.

## Ecology Adoption of Federal Hazardous Waste Requirements

Ecology is proposing to adopt several federal hazardous waste rules into the state Dangerous Waste Regulations. Most are proposed with language that is identical to the federal rule. Others are proposed with differences in the state version. Following are summary paragraphs that describe each rule. Any state differences are noted directly below the federal rule summary in *italics*.

### **Imports and Exports of Hazardous Waste: Implementation of OECD Council Decision C(92)39 Concerning the Control of Transfrontier Movements of Wastes Destined for Recovery Operations 61 FR 16290-16316**

**Summary:** This rule identifies the wastes, under RCRA, that are subject to a graduated system (green, amber, red) of procedural and substantive controls when they move across national borders within the Organization for Economic Cooperation and Development (OECD) for recovery. This rule seeks to make the transactions fully transparent and to prevent or minimize the possibility of such wastes being abandoned or otherwise illegally handled. These requirements will apply only to U.S. exporters and importers of RCRA hazardous wastes destined for recovery in OECD countries (except for Canada and Mexico; waste shipments to and from these countries will continue to move under the current bilateral agreements and regulations). Those U.S. exporters and importers transacting hazardous waste movements outside the scope of this rule will remain subject to EPA's current waste export and import regulations at 40 CFR Part 262, Subparts E and F. This rule does not increase the scope of wastes subject to U.S. export and import controls; it does, however, modify the procedural controls governing their export and import when shipped for recovery among OECD countries. This rule will assist in harmonizing the new OECD requirements, reducing confusion to U.S. importers and exporters and increasing the efficiency of the process.

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### **Hazardous Waste Management System; Carbamate Production, Identification and Listing of Hazardous Waste; Land Disposal Restrictions 62 FR 32974-32980**

**Summary:** This rule amends regulations to conform with the Federal appeals court ruling in *Dithiocarbamate Task Force v. EPA* (98 F.3d 1394 (D.C. Cir. 1996)) that invalidated, in part, Agency regulations listing certain carbamate wastes as hazardous. These regulations also pertain to certain hazardous waste management of carbamate industry wastes under RCRA. The vacated hazardous waste listings and associated regulatory requirements are to be treated as if they were never in effect.

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### **Second Emergency Revision of the Land Disposal Restrictions (LDR) Treatment Standards for Listed Hazardous Wastes From Carbamate Production 62 FR 45568-45573**

**Summary:** The emergency revision extends by one year the time that alternate carbamate treatment standards are in place. EPA is taking this action because analytical problems associated with the measurement of constituent levels in carbamate waste residues have not been resolved. This notice applies only to the carbamate wastes that remain listed as hazardous wastes. This is the second emergency rule related to the carbamate treatment standards. The first was promulgated on August 26, 1996 (61 FR 43924). That rule

established temporary alternative treatment standards for carbamate wastes for a one-year period, because the Agency believed that one year was sufficient time for laboratory standards to be developed and for laboratories to take appropriate steps to conduct the necessary analysis for these wastes. This current rule further extends these alternate treatment standards, because not all of the laboratory standards have been developed. Additionally, there is confusion as to which analytical methods can be used to measure carbamate constituents.

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**Hazardous Waste Combustors; Revised Standards; Final Rule-Part 1: RCRA Comparable Fuel Exclusion; Permit Modifications for Hazardous Waste Combustion Units; Notification of Intent To Comply; Waste Minimization and Pollution Prevention Criteria for Compliance Extensions** 63 FR 33782 - 33829

**Summary:** EPA is adding a new RCRA permit modification provision intended to make it easier for facilities to make changes to their existing RCRA permits. Facilities with certain hazardous waste combustion units can use this permit modification provision when adding air pollution control equipment, making other changes in equipment or making changes in operation needed to comply with upcoming air emission standards. EPA is also adding notification requirements for sources which intend to comply with this rule. (While this is a Clean Air Act provision, it is referenced by the RCRA regulations.) Finally, EPA is adding allowances for extensions to the compliance period to promote the installation of cost effective pollution prevention technologies.

*With this rule, EPA also excluded, from the regulatory definition of solid waste, fuels produced from a hazardous waste which are comparable to some currently used fossil fuels. Ecology is not proposing the Syngas exclusion for adoption because it does not encourage recycling, product sustainability, or pollution prevention efforts. It provides an avenue for using products one time, generating a hazardous waste from that use, then burning the waste. This concept is in opposition to efforts for waste reduction, moving wastes up the waste management hierarchy, and Beyond Waste goals. Other reasons include the problematic concept of “use of process knowledge” to determine if waste meets the syngas specification limit/exclusion, and limitations on what is known about human health risks.*

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**NESHAPS: Final Standards for Hazardous Air Pollutants for Hazardous Waste Combustors; Final Rule** 64 FR 52828-53077; 64 FR 63209-63213

**Summary:** This rule finalizes National Emissions Standards for Hazardous Air Pollutants (NESHAPS) for three source categories referred to collectively as hazardous waste combustors. Hazardous waste combustors include hazardous waste burning incinerators, hazardous waste burning cement kilns, and hazardous waste burning lightweight aggregate kilns. These standards are promulgated under joint authority of the Clean Air Act (CAA) and the Resource Conservation and Recovery Act (RCRA). The rule establishes emission standards for chlorinated dioxins and furans, other toxic organic compounds, toxic metals, hydrochloric acid, chlorine gas and particulate matter. The standards reflect the performance of Maximum Achievable Control Technologies (MACT). After submittal of the Notification of Compliance (NOC) under the CAA, and after modification of the RCRA permit at individual facilities, the RCRA national stack emission standards will no longer apply to hazardous waste combustors. By using both authorities, EPA consolidates regulatory control of hazardous waste combustion into a single set of regulations, eliminating conflicting or duplicative federal requirements while increasing protection of human health and the environment.

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**Land Disposal Restrictions Phase IV: Final Rule Promulgating Treatment Standards for Metal Wastes and Mineral Processing Wastes; Mineral Processing Secondary Materials and Bevill Exclusion Issues; Treatment Standards for Hazardous Soils, and Exclusion of Recycled Wood Preserving Wastewaters** 64 FR 56469-56472

**Summary:** This rule corrects two minor typographical errors and one omission in the May 11, 1999 technical amendment (64 FR 25408) to the Phase IV Land Disposal Restrictions (LDR). This rule also corrects three errors in the May 26, 1998 LDR Phase IV final rule (63 FR 28556).

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**180-Day Accumulation Time Under RCRA for Waste Water Treatment Sludges From the Metal Finishing Industry** 65 FR 12378-12398

**Summary:** This rule promulgates regulations that allow large quantity generators of F006 wastes up to 180 days (or 270 days in certain circumstances) to accumulate F006 waste on-site in tanks, containers, or containment buildings without a hazardous waste storage permit or interim status, provided that these generators (1) have implemented pollution prevention practices, (2) recycle the F006 waste through metals recovery, (3) accumulate no more than 20,000 kg of F006 waste at any one time, and (4) comply with applicable management standards. The same management standards that apply to 90-day on-site accumulation of hazardous waste apply to the new 180-day (or 270-day, as applicable) on-site accumulation of F006 waste. The extension of the accumulation time addresses economic barriers to the recycling of F006 waste through metals recovery. This change will provide large quantity generators of F006 waste an incentive to choose recycling instead of treatment and land disposal as their final waste management option.

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**Organobromines Production Wastes; Petroleum Refining Wastes; Identification and Listing of Hazardous Waste; Land Disposal Restrictions** 64 FR 36365-36367

**Summary:** This rule corrects an error made in the August 6, 1998 rule (63 FR 42110) which listed four wastes from the petroleum refining industry as hazardous. The amending language in the August 6, 1998 rule included a typographical error that made the intent of the amendment unclear.

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**NESHAPS: Final Standards for Hazardous Air Pollutants for Hazardous Waste Combustors; Technical Corrections** 65 FR 42292-42302; 66 FR 24270-24272; 66 FR 35087-35107

**Summary:** This rule adds gas turbines to the list of approved burners for comparable/syngas fuel burners under 40 CFR 261.38(c)(ii)(2). Gas turbines were inadvertently excluded from the list of approved fuel burners in the June 19, 1998 National Emissions Standards for Hazardous Air Pollutants (NESHAPS) rulemaking (63 FR 33782). This rule also corrects a typographical error made in the June 19, 1998 rule.

*Ecology is not proposing to adopt the Syngas exclusion changes that are part of this federal rule since the exclusion itself is not being proposed.*

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**Hazardous Waste Management System; Identification and Listing of Hazardous Waste; Chlorinated Aliphatics Production Wastes; Land Disposal Restrictions for Newly Identified Wastes; and CERCLA Hazardous Substance Designation and Reportable Quantities** 65 FR 67068-67133

**Summary:** (1) This rule adds two wastes (K174 and K175) generated by the chlorinated aliphatics industry to the list of hazardous wastes at 40 CFR 261.32. The new wastes will be subjected to stringent management and treatment standards under RCRA, and to emergency notification requirements. EPA is allowing a contingent-management listing approach for one of these new wastes. Under this approach, the waste will not be a listed hazardous waste if sent to a specific type of management facility. (2) In this rule, EPA also finalizes determinations not to list as hazardous four wastes generated by the chlorinated aliphatics industry.

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**Hazardous Waste Identification Rule (HWIR): Revisions to the Mixture and Derived-From Rules** 66 FR 27266-27297

**Summary:** This rule finalizes the retention of the mixture rule and the derived-from rule with two revisions. The first revision expands the exclusion for mixtures and/or derivatives of wastes listed solely for the ignitability, corrosivity and/or reactivity characteristic. The second revision is a new conditional exemption from the mixture and derived-from rules for mixed wastes.

*The mixture rule being proposed by Ecology is a less stringent regulation than the existing rule that will allow many generators to treat their dangerous waste that would otherwise remain a listed waste. Ecology is proposing to adopt most of this rule; however, it is not proposing to exempt mixtures of solid waste and hazardous waste. This is consistent with other state dangerous waste regulatory requirements that prohibit mixing a hazardous waste with a solid waste. This would be considered dilution of dangerous wastes, and dilution has consistently been seen as an inappropriate waste management alternative.*

*Under state regulations, waste must be evaluated against state criteria once it passes the federal designation scheme. The proposed rule retains consideration of state criteria before a waste would be excluded. This is necessary so as not to mislead generators into thinking that their waste is no longer dangerous waste if it could exhibit state criteria. Under the federal rule, if the waste no longer exhibits the characteristic it could be excluded; the state rule requires that the waste also not exhibit a criteria (for example, toxicity). In this respect, the use of the word “dangerous” is used in the proposed rule since it is comprehensive in that it encompasses characteristic, listed, and criteria wastes.*

*In conjunction with evaluating this rule for state proposal, other federal mixture rules were reviewed. Ecology rules are more stringent than the federal regulations in several areas, and mixtures is one of those areas. “Mixture” rules allow mixing solid waste with listed waste to remove a federal listing. For example, Ecology does not exclude de minimis wastewaters and is not proposing any changes in that area. De minimis exclusions have consistently been considered as inappropriate ways to manage dangerous wastes in Washington primarily because many small amounts of such wastes can add up to larger amounts of waste being excluded through dilution. Additionally, such practices are inconsistent with managing dangerous wastes as far up the waste management hierarchy as possible and moving toward Beyond Waste goals. Federal waste codes should be assigned to any federally regulated hazardous wastes that are not excluded at the state level.*

*Two other federal mixture rules that were reviewed are for hazardous waste containing radioactive waste and for Bevill (mining) wastes. These rules exclude: 1) eligible radioactive mixed wastes when certain conditions are met, and 2) mixing a Bevill waste with a listed waste to remove the federal listing. The federal rule language for mixed wastes at 40 CFR 261.3(h) is not being proposed since the low level mixed waste exclusion rule is not being proposed. See Storage, Treatment, Transportation, and Disposal of Mixed Waste 66 FR*

27218-27266 below. And the state does not exclude Bevill wastes, so it also does not have a mixture exclusion comparable to the federal 40 CFR 261.3(g)(4).

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#### **Change of Official EPA Mailing Address; Additional Technical Amendments and Corrections 66 FR 34374-34376**

**Summary:** This rule updates the official mailing address for EPA, due to the relocation of the majority of its Headquarter offices to downtown Washington, DC.

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#### **Hazardous Waste Management System; Identification and Listing of Hazardous Waste: Inorganic Chemical Manufacturing Wastes; Land Disposal Restrictions for Newly Identified Wastes; and CERCLA Hazardous Substance Designation and Reportable Quantities 66 FR 58258-58300; 67 FR 17119-17120**

**Summary:** EPA has added to its list of hazardous wastes, three inorganic chemical manufacturing wastes. This listing subjects the wastes to RCRA Subtitle C management and treatment standards and CERCLA emergency notification requirements for releases to the environment. Additionally, the toxic constituents found in the newly listed wastes have been added to the list of constituents which forms the basis for classifying wastes as hazardous and establishes treatments standards for the wastes. This rule also subjects the three inorganic chemical manufacturing wastes to the universal treatments standards under the LDRs program.

With this rule, EPA has also made final determinations not to list the remainder of wastes generated by inorganic chemical manufacturing processes which were described in the proposed regulations. Finally, EPA deferred final action on all elements of the proposed rule related to manganese.

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#### **Amendments to the Corrective Action Management Unit Rule 67 FR 2962-3029**

**Summary:** EPA is amending the 1993 Corrective Action Management Unit (CAMU) rule to facilitate treatment, storage and disposal of hazardous wastes managed for implementing cleanup, and to remove cleanup disincentives that RCRA can create. The 1993 CAMU rule is being revised as follows:

- To govern the types of wastes eligible for placement in CAMUs, a definition for “CAMU-eligible waste” is created, which is distinct from the 40 CFR 260.10 definition of “remediation waste”;
- More detailed minimum design and operating standards for CAMUs in which waste remains after closure, with opportunities for Regional Administrator-approved alternate designs;
- Treatment requirements for wastes placed in CAMUs, including minimum treatment standards, with opportunities for adjustment;
- More specific CAMU application information requirements including public notice and opportunity for comment, before final CAMU determination;
- Requirements for CAMUs used only for treatment and storage; and
- “Grandfathering” of certain types of existing CAMUs and allowing them to operate under the 1993 rule.

With this rule, EPA has also:

- Amended the regulations for staging piles to allow for mixing, blending and other similar physical operations that prepare wastes for subsequent management or treatment;
- Added a new provision that allows off-site placement of hazardous CAMU-eligible waste in hazardous waste landfills, if treated to meet CAMU treatment standards;
- Granted interim authorization for the new CAMU amendments, to states currently authorized for the 1993 CAMU rule; and
- Expedited state authorization for the CAMU rule, for states that have authorization for RCRA corrective action but not the 1993 CAMU rule.

*To incorporate the new federal requirements for corrective action management units (CAMUs), the section on corrective action, WAC 173-303-646, has been broken down into several new sections. A table at WAC 173-303-646 shows the proposed new sections and how they relate to the current rule structure. Substantive revisions to WAC 173-303-646 were made in proposed sections -64640, -64650, and -64670. Proposed sections -646910 and -646920 are new. Comments should be directed to proposed sections -64640, -64650, -64670, -646910 and -646920 since these proposed sections reflect the changes based on the new CAMU rule that is being incorporated. No other changes are being proposed to corrective action requirements.*

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#### **NESHAP: Interim Standards for Hazardous Air Pollutants for Hazardous Waste Combustors (Interim Standards Rule) 67 FR 6792-6818**

**Summary:** On September 30, 1999, as amended November 19, 1999 (64 FR 52828 & 64 FR 63209), the Agency promulgated the NESHAPS rule to control emissions of hazardous air pollutants from incinerators, cement kilns and lightweight aggregate kilns that burn hazardous wastes. Portions of the rule were challenged and subsequently vacated by the U.S. Court of Appeals for the District of Columbia Circuit on July 24, 2001. On October 19, 2001, EPA and all petitioners jointly moved the Court to stay the issuance of its mandate for four months to allow EPA time to develop interim standards. The motion also included plans for EPA to issue final standards by June 14, 2005 and to promulgate by February 14, 2002, a rule with amended interim emission standards and compliance and implementation amendments. The Court granted EPA's request and stayed issuance of its mandate until February 14, 2002.

In general, this rule amends the September 1999 NESHAPS rule to accommodate the parties' joint motion. This rule replaces the vacated emission standards temporarily until final standards are promulgated (by June 14, 2005). EPA believes this Interim Standards Rule best fulfills the statutory requirement to have national emission standards in place by a specified time, while avoiding unnecessary disruption and burden to regulated industry, and affected state and federal administrative agencies.

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#### **NESHAP: Standards for Hazardous Air Pollutants for Hazardous Waste Combustors; Final Rule 67 FR 6968-6996**

**Summary:** This rule is promulgated to correct several technical errors which were made on September 30, 1999 (NESHAPS rule) when EPA established standards for hazardous waste-burning cement kilns, lightweight aggregate kilns, and incinerators (64 FR 52828, as amended 64 FR 63209).

*Most of the changes from this rule are to 40 CFR Part 266.100 (BIF) which is not part of the state regulations and those changes are not being proposed.*

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### **Zinc Fertilizers Made From Recycled Hazardous Secondary Materials** 67 FR 48393 - 48415

**Summary:** This final rule establishes a more consistent regulatory framework for the practice of making zinc fertilizer products from recycled hazardous secondary materials. More specifically, it establishes conditions for excluding hazardous secondary materials used to make zinc fertilizers from the regulatory definition of solid waste. The rule also establishes new product specifications for contaminants in zinc fertilizers made from those secondary materials.

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### **Land Disposal Restrictions: National Treatment Variance To Designate New Treatment Subcategories for Radioactively Contaminated Cadmium-, Mercury-, and Silver- Containing Batteries** 67 FR 62618 – 62624

**SUMMARY:** EPA is taking direct final action to grant a national treatability variance from the Land Disposal Restrictions (LDR) treatment standards for radioactively contaminated cadmium-, mercury-, and silver-containing batteries by designating new treatment subcategories for these wastes in response to a rulemaking petition from the Department of Energy. The current treatment standards of thermal recovery for cadmium batteries and of roasting and retorting for mercury batteries are technically inappropriate, because any recovered metals would likely contain residual radioactive contamination and not be usable. The current numerical treatment standard for silver batteries is also inappropriate because of the potential increase in radiation exposure to workers associated with manually segregating silver-containing batteries for the purpose of treatment. Macroencapsulation in accordance with the provisions for treatment standards for hazardous debris is designated as the required treatment prior to land disposal for the new waste subcategories. This will allow safe disposal of these radioactively contaminated materials.

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### **NESHAP: Standards for Hazardous Air Pollutants for Hazardous Waste Combustors-Corrections** 67 FR 77687 - 77692

**Summary:** On September 30, 1999, EPA promulgated regulations to control emissions of hazardous air pollutants from incinerators, cement kilns and lightweight aggregate kilns that burn hazardous wastes. EPA subsequently promulgated three rules that revised these regulations: a Direct Final Rule published on July 3, 2001, an Interim Standards Rule published on February 13, 2002, and a Final Amendments Rule published on February 14, 2002. In today's action, we are correcting technical errors in those regulations.

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**Universal Waste for Mercury-Containing Equipment** Proposed by EPA on June 12, 2002 Hazardous Waste Management System; Modification of the Hazardous Waste Program; Cathode Ray Tubes and Mercury-Containing Equipment 67 FR 40508-40528

*Ecology is proposing to add mercury-containing equipment to the universal waste rule. The proposed rule language is identical to EPA's proposed, but not yet finalized rule.*

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## **WASTE MINIMIZATION**

**HSWA Codification Rule 50 FR 28702-28755 July 15, 1985**

**Biennial Report Correction 51 FR 28556 August 8, 1986**

Ecology is proposing to adopt the portions of these two rules that apply to facilities (TSDs). The purpose of the rule is to require that a program be in place to reduce volume and toxicity of hazardous waste. This is older federal rule language that the state has not previously adopted. Although there are federal waste minimization requirements for both generators and for facility owners and operators, Ecology intends to propose only the facility requirements at this time. Including this rule language in the state regulation will result in more efficient work on permits in the future. Rather than dual permits being issued by both EPA and Ecology, Ecology will be able to issue the entire permit. Adoption of these federal requirements is not intended to conflict with existing pollution prevention planning requirements.

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### **National Environmental Performance Track Program 69 FR 21737-21754, April 22, 2004**

SUMMARY: EPA is issuing regulations applicable only to members of EPA's National Environmental Performance Track Program (Performance Track, or the Program). Today's action includes a revision to the Resource Conservation and Recovery Act (RCRA) regulations to allow hazardous waste generators who are members of Performance Track up to 180 days, and in certain cases 270 days, to accumulate their hazardous waste without a RCRA permit or interim status; and simplified reporting requirements for facilities that are members of Performance Track and governed by Maximum Available Control Technology (MACT) provisions of the Clean Air Act (CAA). Today's final rule reflects EPA's response to comments filed by the public, interested stakeholders and associations, the Performance Track Participants Association, and Performance Track members. These provisions are intended to serve as incentives for facility membership in the National Environmental Performance Track Program while ensuring the current level of environmental protection provided by the relevant RCRA and MACT provisions.

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**Ecology is not proposing to adopt the following rule.**

**Storage, Treatment, Transportation, and Disposal of Mixed Waste 66 FR 27218-27266**

Ecology is not proposing to adopt EPA's Low Level Mixed Waste Exclusion, Storage, Treatment, Transportation, and Disposal of Mixed Waste 66 FR 27218-27266. Adoption of the rule may complicate Ecology's efforts to investigate and remediate, if necessary, past releases from U.S. Ecology, and may be inconsistent with the Hanford Sitewide Permit, which includes the U.S. Ecology site as part of the Hanford "facility," for purposes of corrective action. Note that U. S. Ecology is a commercial low level radioactive waste disposal facility on the Hanford site (radioactive waste landfill). It is operated by a private company (U. S. Ecology) to receive commercial (i.e. not defense related) radioactive waste and is leased to the company by the State of Washington. It is currently under investigation by Ecology for past releases of hazardous materials.

## Preamble for State-Initiated Amendments

The following describes changes that are being proposed to the Dangerous Waste Regulations that are not related to the federal hazardous waste requirements described above. These are technical corrections, clarifications, and changes that are a result of suggestions from stakeholders, and changes that implement projects and research.

While most changes are identified and explained below, other changes were made throughout the regulations to change SIC codes to NAICS codes, to update references to solid waste regulations by changing chapter citations from 173-304 to 173-350 WAC, to correct citations throughout the regulation, to change references from the Uniform Fire Code to the International Fire Code, and make other minor technical corrections.

Changes are also being made to update *Chemical Testing Methods for Designating Dangerous Waste*. The changes themselves are available for review in a separate document. The only changes that show up in the regulations are revision dates in WAC 173-303-110 and a few other sections.

Rule amendment language to implement the Hazardous Waste Facilities Initiative was not available in the earlier draft since various options were still under consideration. Rule language to extend financial responsibility and closure requirements to recyclers and used oil facilities is now being proposed. Several sections are being amended; the explanations and list of sections being amended are grouped together at the end of this document.

### **WAC 173-303-010**

The terms “public health” and human health” are used in the Dangerous Waste Regulations. This change clarifies that the terms mean the same thing and are used interchangeably throughout the regulations.

### **WAC 173-303-040**

“Designated Facility” is being amended for consistency with the change in permit by rule requirements at WAC 173-303-802(5) that allow federally regulated hazardous wastes to be accepted at wastewater treatment units.

### **WAC 173-303-040**

“Knowledge” see explanation under WAC 173-303-300.

### **WAC 173-303-040**

"Partial closure" is amended to correct a citation.

### **WAC 173-303-040**

“Registration number” is added as a new definition.

### **WAC 173-303-040**

“Recycling unit” is added as a new definition. (See Hazardous Waste Facilities Initiative.)

### **WAC 173-303-045**

A change is being made to update the version of 40 CFR that is cited for provisions that are incorporated by reference. July 1, 2003 is the new date for incorporation by reference since it is the version of the federal regulations that includes all newer rules that Ecology is proposing for adoption. A more recent reference was added for the Performance Track rule that EPA promulgated more recently. Also, a citation that was previously

noted as being non-delegable by EPA, federal delisting authority, was moved to show that although EPA can now delegate delisting authority to the states, Ecology has not adopted or incorporated by reference the federal delisting rules. Also, one citation is being corrected.

#### **WAC 173-303-060**

“Notification Form 2” is being changed to “Dangerous Waste Site Identification Form” here and at WAC 173-303-210(2) and WAC 173-303-240(6)(a).

#### **WAC 173-303-070(8)**

This addition is being made to clarify application of the used oil management standards to small quantity generator used oil. This intent was made clear in the Federal Register Notice in 1992. This addition results in consistency between the federal and the state regulations.

#### **WAC 173-303-071(3)(g)**

Clarification is needed for the arsenical-treated wood exclusion (WAC 173-303-071(3)(g)(i)) to clear up confusion about the terms of the conditional exclusion. Some people have misinterpreted the phrase “if the waste is generated by persons who utilize the arsenical treated wood for the material’s intended end use” to mean that the exclusion only applies if the treated wood waste is reused for its intended end use, such as for fence posts and landscaping timbers. Under that interpretation, solid waste disposal would not be allowed.

This revision will clarify that in order to meet the exclusion, the treated wood product needs to have been previously used, and used in a manner typical for treated wood. Arsenical-treated wood waste or sawdust generated by wood preserving facilities or sawmills would not qualify as a typical use. Also, the revision will clarify that the exemption can be used by any generator of an arsenical-treated wood waste, and not just by the person who originally used the product. If the requirement of the exclusion is met, disposal options would include sending the material to a Subtitle D landfill.

#### **WAC 173-303-071(3)(g)(ii)**

This is a clarification that wood wastes are included in this exclusion. The preamble to the 1993 proposed amendments to the Dangerous Waste Regulations states that wood wastes, including sawmill sawdust and shavings, are included in the exclusion. It should be noted that sawdust and shavings from arsenical treated wood (-071(3)(g)(i)) are not excluded wastes.

#### **WAC 173-303-071(3)(k)(i)**

Although Ecology was requested to consider changing the TSCA citation in this exclusion for PCBs for consistency with TSCA, no change is being proposed at this time until PCB issues can be looked at in a broader context. The existing citation currently used in the Dangerous Waste Regulations is somewhat more stringent in that it prohibits PCB waste from being disposed in a solid waste landfill. The broader citation being suggested (40 CFR 761 Subpart D) would allow PCB waste to be land disposed in a solid waste landfill as an option, thereby avoiding the intent of the Dangerous Wastes Regulations.

#### **WAC 173-303-090(5)(a)(iv) Organic Peroxides**

The current dangerous waste regulation requires that all organic peroxide waste described in the federal Department of Transportation (DOT) regulations at 49 CFR 173.128 be designed as ignitable dangerous waste (see WAC 173-303-090(5)(a)(iv)). Ecology is proposing to remove that requirement. Based on the description of organic peroxides in 49 CFR 173.128 and chemical characteristics of organic peroxides, the current dangerous waste regulation is inconsistent with the DOT regulation and inaccurate technically.

Previously, DOT grouped oxidizers and organic peroxides into one class. The dangerous waste regulations referenced that one class for designation as ignitable waste. However, DOT has separated these classes of



chemicals to be more precise about their chemical properties but, to date, Ecology has not make corresponding changes to the dangerous waste regulations. This proposed action will make that change.

Ecology believes that organic peroxides are a dangerous class of chemicals if they are not properly managed. Ecology expects wastes containing organic peroxides will be designated by generators on a case-by-case basis. Unless they are dilute, most organic peroxides wastes will still designate as D001 (flammable), D003 (reactive), or both.

#### **WAC 173-303-100(5)(b)**

This modification is made to clarify the book designation process. The existing language indicates that the severest toxicity be used and that RTECS data supercedes when there are toxic category conflicts. In cases where the most severe toxicity is not in RTECS, the proper toxic category assignment was unclear. This also eliminated fish data from consideration if it was more severe than other criteria because it is no longer listed in RTECS. With this proposed change, which requires the conflicts to be within the same criteria (comparing apples to apples), the use of data for criteria that are not in RTECS is allowed. Also, note that the results from an actual fish bioassay test would take priority over a book designation result for the same waste.

#### **WAC 173-303-104**

This section is being amended to keep all state-specific waste codes in one location.

#### **WAC 173-303-110(3) Chemical Testing Methods Update**

This and other cross citations to Chemical Testing Methods are being updated to reflect revisions to State-only persistence criteria for halogenated organic compounds in Chapter 3, Section C of Ecology publication #97-407 '*Chemical Testing Methods for Designating Dangerous Waste*'. Changes to *Chemical Testing Methods* are available for review. Comments on *Chemical Testing Methods* should be sent directly to Alex Stone (see information on submitting comments above).

Ecology has received numerous comments and concerns about the current regulations and guidance for designating wastes containing halogenated organic compounds (HOCs) for state-only persistence. The main concerns identified were 1) Ecology's current definitions identify all HOCs as compounds of concern regardless of the environmental impact those compounds may or may not have, 2) the universe of HOCs is so large, and HOCs are so widely used that it is difficult if not impossible to accurately identify state-only persistent wastes, 3) Ecology's current guidance does not clearly identify how to obtain the information (detailed analyses) needed to determine state-only persistence, and 4) Ecology's current guidance is inconsistent and difficult to follow.

Based on this input, Ecology is proposing to revise the regulations and the guidance. These revisions will be limited solely to the sections dealing with state-only designation of waste containing HOCs (Chapter 3, Section C). Unless otherwise noted, the remainder of the guidance will not be changed during this process and is not open for comment or review.

Ecology formed a team of technical experts to review and update the regulations and guidance dealing with the designation of wastes containing HOCs. The team included experts from the Hazardous Waste and Toxics Reduction (HWTR) and Nuclear Waste Programs, and from Ecology's Manchester Laboratory. The team reviewed the technical issues associated with persistence and formulated revisions to the guidance which resolves the issues identified above. Models of existing regulations were explored, and one based upon the current used oil regulations is reflected in changes to the current guidance.

The revisions to Chapter 3, Section C and the associated Appendices consist of 1) revising the screening technique which provides the generator with a more efficient and cost effective way to determine whether or not



a waste contains sufficient HOCs to designate as state-only persistent waste, 2) allowing the designation of the waste to be based solely upon the screening method if the generator chooses, 3) allowing the generator to conduct specific chemical analyses of their wastes to prove that waste does not contain HOCs of concern even though it failed the screening test, 4) providing a table of specific HOCs of concern which Ecology currently identifies as persistent compounds or compounds of concern that have potential persistent issues, 5) providing an explanation of how chemicals will be added to or deleted from this list of HOCs of concern as additional scientific information is made available, 6) providing improved definitions and examples of waste streams that are both included and exempt from these criteria, and 7) providing two flow charts that can be used to follow the designation process and, clarify how the designation is to be accomplished.

#### **WAC 173-303-161(6)**

The current timeframe for maintaining a list of labpack contents is not being interpreted consistently. For example, one interpretation is that the time that a list of all contents must be kept is only until the annual report is complete, which is less than one year. If the contents of the labpack are not listed on the annual report, all record of what is actually shipped could be lost by March 1st of the following year. Adding a time limitation to this requirement provides clarity and is consistent with the time limit for maintaining other types of paperwork.

#### **WAC 173-303-190(5)(b)**

This change is made as a follow up to the transportation changes that were adopted in June 2000. The marking requirement was inadvertently noted as applying to packages containing one hundred ten gallons. This change will include the intermediate bulk containers of greater than 110 gallons but less than a thousand gallons and would also include cylinders within this range that are commonly used for antifreeze. Most people are already marking in accordance with the higher amount (one thousand gallons) as it does not make sense for the marking requirement to apply to small, but not intermediate sized containers.

#### **WAC 173-303-200(2)(a)(ii)**

WAC 173-303-200(2)(a) is being amended to clarify that contingency planning and general facility inspections are required for satellite accumulation. Under the current rule, it is not clear that contingency planning and general facility inspections are required in satellite accumulation areas. WAC 173-303-200(2)(a)(ii) specifies compliance with (d) of subsection 200(1). This has been interpreted to eliminate the area of satellite accumulation (essentially the footprint of the waste storage container) from contingency planning and general facility inspections. This is not consistent with the way this regulation has been interpreted or implemented in the past by Ecology. This clarification provides consistency with Ecology's intent and practice of requiring contingency plans (-350) and general facility inspections (-320) in areas where there is the potential for impact on public health and the environment in the event of an emergency circumstance (-350), and where malfunctions and deterioration, operator errors, and discharges...may cause or lead to the release of dangerous waste constituents to the environment, or a threat to human health (-320). Including subsection (1)(f) makes it clear that LDR requirements apply to waste that is shipped directly from a satellite area.

#### **WAC 173-303-201(2)(e)**

This correction is being made since requirements for containers are already cited in WAC 173-303-200 and apply to this section as well.

#### **WAC 173-303-300(2)(a) & (b) and new definition in WAC 173-303-040 for "Knowledge"**

Ecology is proposing to amend the regulations to clarify requirements for confirming and documenting information from a generator on a waste profile for a waste stream. Ecology believes the proposed amendment is consistent with general requirements in the existing regulations to ensure sufficient information for waste designation (WAC 173-303-070) and proper management of the waste (WAC 173-303-300(2)).

In current permits, facilities have been allowed to rely on generator knowledge to complete waste profiles and make waste acceptance decisions with the understanding that knowledge is documented and supported. This allows treatment, storage, and recycling facilities to avoid unnecessary and costly laboratory analysis. Waste analysis plans include test methods and analysis for the purpose of safe and proper waste management instead of focusing only on methods used for waste designation or identification. When Chapter 173-303 WAC specifies a method, “representative and appropriate sampling and test methods” refer to methods in WAC 173-303-110 for formal waste designation and other regulatory requirements. However, other representative and appropriate sampling and test methods are not precluded when needed to develop a complete waste characterization to support an accurate waste profile used by dangerous waste management facilities to comply with their permit or WAC 173-303-300, general waste analysis.

This amendment specifically addresses one aspect of the regulations on waste analysis that has been a focus of the HWTR program and commercial TSDF over the past several years. In addition to being consistent with general requirements in the current regulations, the proposed changes are consistent with federal guidance on waste analysis and current final permits at commercial dangerous waste management facilities on the subject of waste analysis and the use of generator knowledge. The rule amendment lists three approaches to obtain and confirm knowledge from generators on a waste stream. Ecology encourages commenters to suggest additional approaches consistent with the current general regulation and federal guidance that would equally ensure sufficient information about the waste.

During public review of an earlier draft, several comments and question were submitted on these requirements.

1) Wouldn't the definition of “knowledge” be difficult to implement since TSDFs have knowledge about the treatment of the waste and the generators have knowledge of the processes generating the waste?

Ecology's goal with the rule amendment is to ensure that sufficient generator knowledge is passed onto the TSD so the waste can be properly managed. Further, Ecology wants to ensure that records on how the knowledge was verified are kept by the TSD.

2) Wouldn't it be difficult for Washington TSDFs to visit some of the generators to become more familiar with the waste being generated?

A site visit to the generator's facility is not the only option open to a TSD to gain and confirm sufficient information about the waste. However, if the process generating the wastes or the level of reliability of the information on the waste is questionable so that a site visit is the only way to ensure adequate information for proper waste management, then that step should be taken.

3) The proposed change would lengthen the time needed to approve a profile because the TSDF would need to become familiar with many of the generators' processes. This additional activity would require resources (labor and/or travel) and result in higher disposal costs for Washington TSDFs and generators.

Based on the regulations, federal guidance, and current commercial Part B permits, the TSD needs to obtain and confirm sufficient information about the waste. The rule amendment elaborates on that requirement but doesn't impose new requirements.

4) Isn't the ability of individual facilities to adapt waste analysis requirements to their particular needs being eliminated through the proposed rule amendments since they are prescriptive as to the approach and requirements?

The rule amendment lists three ways to approach gaining and confirming knowledge on the waste. Ecology encourages commenters to offer other viable methods that would equally ensure quality knowledge about the waste.

5) Do these requirements exist in current permits?

Current commercial dangerous waste permits already include these requirements. The rule amendment will help highlight the requirement and ensure all further permits will address adequate knowledge.

6) Isn't the proposed definition of "knowledge" significantly more prescriptive than the current Ecology regulatory framework? Does this conflict with *Chemical Testing Methods for Designating Dangerous Waste* (publication #97-407), and will the definition result in a shift to more testing?

Requirements to ensure the use of sufficient knowledge are already in the current regulations. The rule amendment is a clarification of how knowledge can be obtained, confirmed and documented and is not expected to result in a shift to testing. Instead, it should result in more clarity for those who rely on the use of knowledge for designation. The proposed definition of "knowledge" provides clarity for generators, and it is consistent with WAC 173-303-070(3)(c)(ii) which provides the option to use knowledge when it can be demonstrated to be sufficient for determining whether or not the waste is designated. It is also consistent with requirements in WAC 173-303-330(2) on the need for reliable information about a waste for its safe and proper management. Guidance in "*Chemical Testing Methods*" is consistent with the regulations that knowledge, if used in lieu of chemical testing, must be sufficient for proper waste designation.

#### **WAC 173-303-400(3)(c)(ix)**

Owners and operators of interim status facilities are currently required to have a written plan for closure of dangerous waste management units; this plan must be available for submittal and inspection by Ecology. A change is being proposed to require owners or operators of interim status facilities to submit a closure plan for partial closure of a tank, container storage, or incinerator unit at least 45 days prior to the date on which they expect to begin closure of such a unit. This is consistent with the current requirements that require owners or operators to submit a plan for final closure of a facility with such units.

An owner or operator of an interim status facility is currently required to notify Ecology before beginning a final closure of facility with only tanks, container storage, or incinerator units. The proposed change requires an owner or operator of an interim status facility to notify Ecology of partial closure of a tank, container storage, or incinerator unit at least 45 days prior to date on which he expects to begin closure of such a unit. Notification is in the form of a letter to Ecology.

Partial closure of these units will then be subject to public comment on the closure and to Ecology oversight, consistent with current requirements for final closure of a facility with such units.

Owners and operators of interim status facilities are currently required to submit closure certification within 60 days of completion of closure for each dangerous waste management unit and within 60 days for completion in final closure. The proposed change clarifies this requirement by making it a complete phrase.

#### **WAC 173-303-505 (1)**

Fertilizer registration applications are approved or denied based on reviews conducted by Ecology and the Washington State Department of Agriculture as directed by chapter 15.54 RCW. Ecology reviews waste-derived fertilizers and makes recommendations for registration as described in WAC 173-303-505.

Currently, Ecology's review process requires the registrant of a waste-derived fertilizer to submit either: 1) toxicity characteristic leaching procedure (TCLP) metals test data and halogenated organic compounds (HOC) test data, or 2) a complete description of the fertilizer manufacturing process including a list of all ingredients in the fertilizer and the sources of those ingredients to include a description of the original generation process for each ingredient as well as evidence that any wastes used in the product do not designate as a dangerous waste according to the procedures in WAC 173-303-070. The information in either #1 or #2 is currently required for every renewal of a waste-derived fertilizer registration, and if the registrant chooses option #1, the TCLP and HOC test data must be rerun with each renewal.

The proposed rule amendment would provide Ecology the discretion to accept a waste-derived fertilizer registration renewal without requiring new TCLP and HOC test data. This discretion is limited to renewals of waste-derived fertilizers that have provided this information to Ecology at least twice before. The rule change would also require the registrant to provide documentation that the source materials in the product have not changed.

Ecology does not find it necessary to require new test data for renewals of waste-derived fertilizers that have met the TCLP and HOC testing requirements at least twice before. The expense of these tests, typically several hundred dollars, is also a factor in this proposed rule change. However, the proposed rule amendment provides Ecology with the option to continue to require updated TCLP metals and HOC testing for registration renewals. Thus, if there were inconsistencies in prior test results or other concerns regarding a particular product, Ecology may require up-to-date test results with any renewal application.

#### **WAC 173-303-515(13):**

Ecology is proposing to amend the used oil management standards to include a section that gives the agency the ability to require generators of used oil to test their waste on a case-by-case basis to identify if the oil is on or off specification oil or to rebut the presumption that the oil is actually dangerous waste. This regulation will simplify testing requirements and be a benefit to used oil generators by allowing Ecology to request the less expensive analytical tests for on-specification determinations rather than the more expensive tests for designation.

In the past when an Ecology inspector had reason to believe that used oil was not on-specification oil, the only means to require testing was to declare the waste a solid waste and require dangerous waste designation testing in WAC 173-303-070. Designation testing can be much more expensive and involve more tests than the proposed testing to determine if a waste is on-specification used oil or off-specification used oil. There are also instances when used oil is high in chlorinated compounds. In some instances it does not mean that dangerous waste was added to the oil, but that the oil was contaminated with salt water. Consistent with current federal guidance on the used oil regulations, to rebut this presumption the new testing authority under WAC 173-303-515(13) would allow Ecology to ask for a test for just chlorinated compounds to ensure that the dangerous waste was not mixed with the used oil. Testing for specific chlorinated compounds is part of the allowed procedure under EPA guidance to rebut the presumption that listed waste was added to a used oil, and is therefore established policy for implementing the used oil rules.

#### **WAC 173-303-610(2)(b)**

This change updates the reference to the current standards in the MTCA regulations.

#### **WAC 173-303-610(3)(c)(i)**

This change requires owners or operators of final status facilities to notify Ecology of a partial closure of a tank, container storage, or incinerator unit at least 45 days prior to the date of which they expect to begin closure of such a unit. This is consistent with the current requirements that require owners or operators to submit a plan for final closure of a facility with such units. Notification is in the form of a letter to the Department of

Ecology. Partial closure of these units will then be subject to Ecology oversight, consistent with current requirements for final closure of a facility with such units.

**WAC 173-303-640(2)(c)(v)(B) and -640(4)(h)(i)(C) notes**

This note is being modified since this publication is now out of date and the copy available states that it is "For Historical Purposes Only". It is misleading to refer to the outdated American Petroleum Institute (API) publication that is essentially impossible for a facility operator to obtain and is no longer used by the industry. Other guidance on this topic is available and cited in the note.

**WAC 173-303-640(7)(d)**

These changes bring this subsection into alignment with the other sections in the Dangerous Waste Regulations that require reporting for spills. The existing rule language in section -640 stating that spills/releases from tanks that go to the environment need to be reported within 24 hours conflicts with the requirements of section -145. If a spill is classified as an emergency with contingency plan implementation, then it would also conflict with -360(2) requirements. In addition to the "immediate" vs. 24-hour notification, -640(7) specifies a report of the release within 30 days. Again, if the release was classified as an emergency with implementation of the contingency plan, a report is required within 15 days (see -360(2)(k)). Also, the current version of -640(7)(d)(ii) states that if a release is below the reportable quantity (RQ), then no reporting is required. This is yet another conflict with -145, which specifies that any amount is reportable if it impacts human health or the environment.

**WAC 173-303-802(5) and WAC 173-303-040 *Designated Facility***

The purpose of this rule change is to allow facilities that operate wastewater treatment units under Permit by Rule (PBR) as described in WAC 173-303-802 (5) to receive hazardous wastewaters that have been generated from off site.

For example, this change will benefit those industries and businesses that operate wastewater treatment units under PBR by allowing them to take wastewaters from their off-site subsidiaries (or other similar industry wastewaters) for treatment, rather than having to send the wastewater to a third party for treatment. Industries or businesses that would benefit from this change include the aerospace and petroleum refinery industries as well as some government facilities.

The scope of this rule change will be limited to the receipt of wastewaters from off-site that are from a similar industry and have similar dangerous constituents to those in the wastewaters that are normally generated and treated by the host wastewater treatment unit. In others words, the host could only accept wastewaters that will be covered by permit requirements and will be effectively treated by the wastewater treatment facility. Businesses wanting to take advantage of this change should plan to do so when their wastewater discharge permit is up for renewal.

What this change will not do is open up opportunities for businesses to operate under permit by rule and receive wastewater from unrelated off-site sources. The potential receiving facility must have a wastewater treatment unit that was designed to treat wastewaters that are generated on-site before it would be eligible to receive similar wastewaters from off-site generated by their associated businesses.

Several comments and questions were raised during public review of the draft amendments on proposed changes to permit by rule. The following information, based on public comment, more thoroughly explains the proposed rule.

1) Is information available on the number and type of facilities that would take advantage of this provision, their compliance track record, the assurances that would be in place to manage the practice of treating federally regulated hazardous waste via a permit by rule facility, expected benefits, and potential environmental impacts?

Ecology is aware of several petroleum refineries and an aerospace manufacturing facility that would utilize this provision. Because the permit by rule allowance is tied to having a water quality discharge permit, the public will have an opportunity to review individual facility proposals during the water quality permitting process. There is a list of requirements in WAC 173-303-802(5) that a facility must comply with to have a permit by rule for treating dangerous wastewater generated off-site. These requirements are to ensure that the wastewater is managed appropriately to protect human health and the environment.

The ability of a facility to accept and treat dangerous waste from off-site will be evaluated on a case-by-case basis in the water quality permitting process. The proposed change is expected to provide opportunities for better treatment of dangerous waste streams. For example, this amendment would allow a petroleum refinery to treat contaminated groundwater from a gasoline station cleanup. Normally, this wastewater would be sent to a publicly owned treatment works which treats a broad range of wastewater types and so is not necessarily acclimated to this type of material. The petroleum refinery wastewater treatment system is designed to specifically treat oily/petroleum-contaminated wastewater and would likely result in better treatment.

Pollution prevention opportunities are evaluated at the point of generation, not at the receiving treatment facility. The proposed amendments should not affect this practice.

2) What are the potential water quality implications?

The proposed amendments will allow a facility to have a permit by rule provided they meet a number of conditions. These conditions include having a wastewater discharge permit or authorization that covers this waste stream. To be covered under a permit or authorization, specific information about the wastestream will have to be reviewed by the regulating authority. In essence, the permit by rule allowance for wastewater streams received from off-site will be reviewed and granted on a case-by-case basis.

The water quality implications of accepting and treating dangerous wastes from off-site will be evaluated as part of the water quality permitting process. This process requires an individual facility to submit a permit application that shows the dangerous wastewater received from off-site as a source of pollutants to their wastewater treatment unit or system, including volume and characteristics of the wastewater. The water quality permit writer will review this information to: determine if the dangerous waste and other constituents in the waste stream will be effectively treated in the wastewater treatment unit or system, determine if there will be impacts to the receiving water and sediments, and check that monitoring requirements and effluent limitations in the permit or authorization will cover the constituents in the waste stream.

3) The dangerous waste permit requirements in terms of storage, handling, disposal, and site closure, are vastly different from the requirements of the Clean Water Act and the associated NPDES permits that would now govern the treatment of the hazardous waste with PBR. Are the proposed requirements sufficiently protective?

The proposed amendments only exempt facilities from needing a dangerous waste permit for treatment of dangerous wastewater in a totally enclosed treatment facility, elementary neutralization unit, or wastewater treatment unit if the treatment is covered by a water quality permit or written discharge authorization. If the facility does not have a permit for this activity or if they are storing, handling, or disposing of the dangerous waste prior to or after treatment, they will still need a dangerous waste permit. Dangerous waste closure requirements would also still apply to any storage or disposal units and treatment units not qualifying for permit by rule.

4) What does “include the waste stream in the application” mean? Would they also need to define when and how much hazardous waste would be added to their treatment plant?

Water quality permit application instructions generally delineate the information required for waste streams that will be treated in totally enclosed treatment facilities or elementary neutralization or wastewater units. However, to be more specific and to cross reference water quality permit application requirements, the wording in WAC 173-303-802(5)(a)(ii) was revised from the earlier draft to read as follows: “include the waste stream as a source of wastewater in the application and provide an estimate of flow, the chemical characteristics of the waste stream, whether it is a batch vs. continuous discharge, and the treatment that it will receive;”. This is information the water quality permit writer will need to evaluate the effectiveness of treatment and potential impacts to the receiving water and sediments.

5) What does “same industry” mean? Same SIC code of the same business?

“Same industry” can refer to the same company, a subsidiary of that company, or an industry with the same SIC (now NAICS) code or in the same category of NAICS codes.

6) The proposal refers to dangerous wastewater. Would this amendment (via the definition of designated facility) allow a PBR facility to also accept dangerous waste sludges or sediments collected from sumps that are highly concentrated wastes?

Ecology wanted to focus on the characteristics of the wastewater. Generally, wastewater from the same industry type generated off-site will have similar chemical characteristics as wastewater generated on-site and so is more likely to be effectively treated in the receiving facility’s wastewater treatment unit/system. The proposed amendment is to allow the treatment of wastewaters from off-site; it was not intended for sludges or sediments. It is very unlikely that a facility could demonstrate that a sludge/sediment would be effectively treated; therefore, that waste stream would not be allowed.

7) The proposed rule requires waste stream information to be included in both the discharge permit and the permit application. The permittee already follows the State’s wastewater regulation (Chapter 173-216 WAC) to include appropriate information in the permit application in order to obtain the discharge permit. Isn’t it unnecessary to include WAC 173-303-802(5)(a)(ii) in the proposed rule?

The requirement that waste streams be included in the water discharge permit application is to cross-reference the requirements for water quality permit applications. Sources of wastewater to be treated at a facility must be listed in the permit application, including an estimate of flow and the type of treatment the waste stream will receive. The water quality permit writer will also be reviewing the characteristics of this waste stream to determine whether it can be effectively treated and the potential impacts to receiving water and sediments. The proposed amendment was intended to be redundant to further emphasize the information that needs to be provided for the water quality permit writer to adequately evaluate the addition of the new waste stream.

8) Should the provision be limited to wastewater generated by subsidiaries rather than from the “same industry”?

Ecology wanted to focus on the characteristics of the wastewater. Wastewater with similar chemical characteristics can be generated from several different sources within the same industry type and be effectively treated in a receiving facility’s wastewater treatment unit/system. Oily wastewater from one gas station could have the same chemical characteristics as from another gas station operated by a different company and be just as treatable. To limit this allowance to wastewater from subsidiaries seems unnecessarily restrictive.

9) The proposed changes to the permit-by-rule section take a more stringent state-only provision and seem to make it even more stringent and less flexible than the federal regulations. Ecology is increasing the level of stringency by requiring “waste stream” information in a permit application when permit application requirements do not call for this information. Also, is Ecology deleting the opportunity to take off-site waste when the facility has a permit or interim status?

The proposed rule will make the permit by rule allowance less stringent and more flexible than the current rule. Ecology’s more restrictive approach than EPA with permit by rule was intentional to provide some additional safeguards to ensure that hazardous wastewaters are managed appropriately and in a manner protective of human health and the environment. Water quality permit applications do require that all sources of wastewater be reported. (Example -- See instructions for filling out the NPDES Form 2C and the Application to Discharge Industrial Wastewater to a Publicly-Owned Treatment Works) The proposed amendment does not take away the opportunity to take off-site wastewater when a facility has a TSD permit or interim status. It just removes this restriction as the only way that a totally enclosed treatment facility or an elementary neutralization or wastewater treatment unit can qualify as a designated facility.

10) Can Ecology delete references to on-site and off-site waste distinctions in the proposed rule?

The wording was specifically crafted to make clear that facilities treating both sources of wastewater would have a permit by rule provided the other conditions of WAC 173-303-802(5) are met. The term “waste stream” is used to encompass all of the characteristics of wastewater, not just the chemistry. For example, the volume of a waste stream is also an important consideration in determining whether a wastewater stream can be effectively treated.

11) Can Ecology add “EPA” to (a)(i) since EPA is the one who issues NPDES permits at federal facilities?

Several different agencies have the authority to issue NPDES permits including EPA, Ecology, and the Energy Facility Site Evaluation Council. Rather than specifically listing all of these agencies, the wording was left to cover the different possibilities.

#### **WAC 173-303-910(1)(c) and -910(6)(f)(i) Petitions**

The Administrative Procedures Act, Chapter 34.05 RCW, limits the amount of time for a petition to be acted upon by an agency to 60 days total. This includes the time to initially review the petition, make a tentative decision, obtain public comment, then review those comments and make a final decision. The current 45 day minimum public comment period in WAC 173-303-910(1)(c) does not allow adequate time for the agency to review the petition, and to obtain and review public comment, then make a final decision. The shorter minimum public comment period will make it more feasible to meet the time limitations imposed by the Administrative Procedures Act.

#### **WAC 173-303-9904 W001 Listing**

The state waste code for PCB is being changed from W001 to WPCB to prevent confusion since EPA now uses “W001” as a form code for the Hazardous Waste Report Instructions and Forms. EPA changed the code for lab packs to W001. These codes have already been changed for the purposes of reporting as of January 2003. The waste code W001 is also being changed to WPCB at the following locations: WAC 173-303-071(3), WAC 173-303-515, and WAC 173-303-9904.

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## **Hazardous Waste Facilities Initiative**

### **Authority**

The authority for the department to establish and administer standards for the management of hazardous wastes and used oil lies in the State Hazardous Waste Management Act, Chapter 70.105 RCW. In Washington, the term “dangerous wastes” is also used. Dangerous wastes are all federally regulated hazardous wastes (listed, flammable, corrosive, reactive or toxic), plus additional types of wastes captured by Washington’s regulations because they are toxic or persistent. For the purpose discussion of this proposal, the terms “hazardous” and “dangerous” wastes are synonymous and mean all of the wastes covered by the Washington regulations, Chapter 173-303 WAC. The Dangerous Waste Regulations are the standards that apply persons who generate, transport, recycle, treat, store and/or dispose of dangerous wastes. They also contain the standards applied to the generation and handling of used oil.

The department has adopted most of the provisions of federal hazardous waste regulations into state rules. The federal rules (Resource Conservation and Recovery Act, subtitle C regulations) are contained in the code of federal regulations, 40 CFR Parts 260 through 279. The U.S. Environmental Protection Agency has authorized the department to administer major portions of the RCRA C regulations in Washington, including generator requirements, hazardous waste permits, used oil management standards, and enforcement. In most situations, this authorization means that businesses and other regulated persons deal only with the Department of Ecology rather than Ecology and EPA.

### **Background**

There are currently twenty-eight facilities in Washington that are actively accepting hazardous wastes or used oil for management. This includes treatment, storage or disposal (TSD) facilities, recyclers and used oil processors that are owned by private companies or federal agencies. In some cases, a facility may be conducting more than one type of activity. A list of these facilities may be seen on the department’s new web site at: <http://www.ecy.wa.gov/programs/hwtr/hwfacilities/>.

### **Current Requirements**

TSDs are subject to comprehensive and detailed hazardous waste permits and regulatory requirements that include conditions for design and construction, operation and maintenance, record keeping, closure and financial responsibility. Closure and demonstration of financial responsibility for TSDs is required through applicable standards of WAC 173-303-610 and WAC 173-303-620. The department has provided detailed guidance on the preparation of closure plans in “Guidance for Clean Closure of Dangerous Waste Facilities”, publication #94-111, August 1994. This publication may be viewed on the internet (<http://www.ecy.wa.gov/biblio/94111.html>).

The primary steps involved in the closure and demonstration financial responsibility for facilities include:

- Preparation and submittal of a detailed closure plan. The closure plan must identify how the facility will meet closure performance standards; describe procedures for removal of wastes; decontamination procedures; account for the disposal or treatment of the maximum inventory of wastes in dangerous waste management units; describe procedures for sampling and analysis; and discuss the schedule for closure of each dangerous waste management unit. The closure plan must be reviewed and approved by the department.
- Cost estimate for closure. A detailed written estimate must be prepared and submitted at the time of submittal of the closure plan. This cost estimate must be consistent with the closure plan. If the department requires changes to the closure plan, the cost estimate must reflect the final closure plan approved by the department. The cost estimate must be based on the costs to the owner/operator of hiring a third party to close the facility; and, may not include the salvage value of any unprocessed wastes. The cost estimate for

closure must be adjusted annually to reflect inflation. It must also be modified reflect changes in the closure plan due to changes in facility processes, capacity or operations.

- Demonstration of financial assurance for closure. The facility owner/operator must submit financial instruments in an amount equal to the closure cost estimate consistent with the closure plan approved by the department. This demonstration must be updated each year until closure is completed.
- Demonstration of liability coverage (pollution liability coverage). The facility owner/operator must demonstrate financial responsibility for bodily injury and property damages to third parties caused by sudden accidental occurrences arising from operation of the facility. For treatment and storage facilities, the minimum liability coverage required is \$1 million per occurrence with an annual aggregate of at least \$2 million. Slow releases (described as 'non-sudden' releases in the regulation) such as a leak from the bottom of a tank into underlying soil, are typically not covered by this type of liability coverage.

Owners and operators of facilities that recycle hazardous wastes are subject to the Dangerous Waste Regulations including notification, waste designation, waste analysis, emergency preparedness, personnel training, waste accumulation, container and tank standards, and decontamination at the time of closure. Unless specifically required on a case-by-case basis, recycling processes are generally exempt from the hazardous waste permit process.

The department has followed EPA's approach to regulating used oil by establishing management standards that are separate from, and in most cases less stringent than, regulations for managing hazardous wastes. The used oil management standards are found in WAC 173-303-515. The reason for creating separate standards for used oil, even though it is a type of waste that may exhibit many hazardous characteristics, is that there is a system in place that provides environmentally protective and economical recycling of used oil. In Washington, the vast majority of used oil that is collected is used as fuel for industrial burners and boilers.

#### Origin of this proposal

Three facilities in Washington, including a recycler, a used oil processor, and a combination TSD/recycler/used oil processor failed and were abandoned during the period from 1999 through 2001. The department began assessing inadequacies and gaps in hazardous waste requirements that allow facility owners and operators to avoid accountability for the financial costs of removing and disposing of wastes; decontaminating equipment, tanks and buildings; and addressing threats to human health or the environment.

In 2002, the department published a report to the Legislature that outlined problems and inadequacies with the current system for regulating, permitting, maintaining public information, and funding Ecology's oversight responsibilities for TSDs, recyclers and used oil processors (see <http://www.ecy.wa.gov/biblio/0204028.html>). Representatives from the waste management industry, large and small businesses, public interest and environmental organizations, and government (local, state and federal) were consulted during the process of identifying these problems and proposing solutions.

Five problem areas were identified, including:

1. Major waste streams and activities at waste management facilities are not subject to financial responsibility requirements. Used oil, spent antifreeze, and household hazardous wastes are examples of exempt waste streams. Off-site recycling and used oil processing/re-refining are examples of exempt activities.
2. Regulations and mechanisms addressing financial responsibility for TSDs are inadequate and/or out-of-date.
3. The department's ability to address potential environmental threats at recycling and used oil processing/re-refining facilities is limited.
4. Potential customers (i.e., waste generators) and interested citizens have difficulty in obtaining information on permits, compliance, enforcement, closure and cleanup at waste management facilities.
5. Resource levels are inadequate for current demands on Ecology's permitting and compliance programs.

The rules proposed in this action are intended to specifically address problems 1 and 2, identified above. In simple terms, these rules will assure that owners and operators of hazardous waste recycling or used oil processing/re-refining facilities cannot close, abandon, or otherwise avoid paying for waste removal, disposal and decontamination of equipment and structures. Under current rules these facilities may shut down and leave the costs of controlling environmental threats, removing wastes and conducting sites cleanup to property owners, former customers, or tax payers. For recycling facilities and used oil processors/re-refiners, these costs may often range from tens of thousands to several hundred thousand dollars. In some cases in Washington, the total cleanup costs have been several million dollars. Several examples are provided in the department's report to the Legislature.

Problem 3, above, has been partially addressed by the department through adjustments to its inspection and enforcement program, and through these proposed rule revisions by clarifying its existing authority to seek court-ordered restraining orders. Problem 4 has been addressed through the creation of a new internet web site that provides information on active facilities and guidance to waste generators on selection waste management facilities (see at <http://www.ecy.wa.gov/programs/hwtr/hwfacilities/>).

Problem 5, above, is not addressed through this proposal. In its 2002 report to the Legislature, the department recommended that a new fee be established for actively operating TSDs, recyclers and used oil processors. If adopted through the legislative process, the new fee would have created new revenues to pay for the department's development of permits and permit modifications, inspections, and assistance to facility owners/operators. The fee recommendation was controversial and did not receive sufficient support to justify submittal as draft legislation.

In the fall of 2003, the department presented two major options to stakeholders for revising closure and financial responsibility requirements for treatment, storage and disposal (TSD) facilities, recyclers and used oil processors. Major features of these options included:

*Option 1.* Revise selected requirements of financial mechanisms for TSDs. Extend traditional closure and financial responsibility requirements to recyclers and used oil processors/re-refiners.

*Option 2.* Revise selected requirements of financial mechanisms for TSDs. Require recyclers and used oil processors/re-refiners to prepare and submit closure plans. Establish a maximum closure amount of \$50,000 for recyclers and used oil processors/re-refiners with a provision that the amount may be lower if justified by a detailed closure cost estimate; and delete the requirement for pollution liability coverage.

The \$50,000 figure was based on work by department staff. Closure costs were estimated for two hypothetical facilities (a small scale solvent recycler and a medium-sized used oil processor) using two methods suggested by EPA and a third method employing actual cost figures from two recently approved closure plans. \$50,000 was proposed because it was in the low-to-middle range of the figures calculated. Option 2 was proposed because it a simpler approach to preparing cost estimates of closure for facility owners/operators; it would be easier for the department to review and establish compliance; and, it would not be subject to the requirement for annual updates. The primary disadvantage of setting the maximum closure cost at \$50,000 is that in some situations it would not provide sufficient funds for closure for all facilities. If costs for closure exceeded \$50,000, those costs would have to be borne by the facility owner/operator, property owners, former customers, or taxpayers.

Based upon comments received from stakeholders during an informal comment period and during comments from the public on our published intent to adopt rule (CR101), the department has chosen to propose Option 1, above. The primary reason for this decision is that owners/operators of facilities engaged in off-site recycling or used oil processing/re-refining should be accountable for the full cost of closing their facilities. Most of the

persons submitting comments felt that the \$50,000 maximum was not sufficient to cover the costs of closure. Several persons also expressed concern about the absence of pollution liability coverage. Other comments reflected a desire to scale the maximum closure amounts to the volume, types of wastes, or environmental risks posed by the wastes being managed.

The department considered these comments and determined that Option 1 provided the greatest level of confidence that the costs of closure would be accounted for and that the preparation of a site-specific cost estimate is scaled to the volume, types and risks associated with the wastes being managed. The primary disadvantage of selecting Option 1 is that it will result in higher direct costs for facility owners/operators for complying with closure and financial requirements, and to the department for administrative costs. Option 1 is also expected to indirectly result in higher costs to waste generators as facility owners/operators pass on their costs to customers.

The rules proposed in this action will revise and strengthen current standards for the protection of human health and the environment for hazardous waste and used oil management facilities. Revisions are proposed to the following sections of the Dangerous Waste Regulations:

WAC 173-303-040	Definitions
WAC 173-303-120	Recycled, reclaimed, and recovered wastes
WAC 173-303-515	Standards for managing used oil
WAC 173-303-610	Closure and post-closure
WAC 173-303-620	Financial requirements
WAC 173-303-960	Special powers and authorities of the department

**With a few exceptions, these revisions will not apply** to facilities conducting on-site recycling or on-site used oil processing, businesses collecting used oil from do-it-yourself generators, or household hazardous waste/small business hazardous waste management facilities operated by city or county agencies. The pesticide collection program as currently administered by the Washington Department of Agriculture will also not be affected by these revisions. Facilities owned and operated by state or federal agencies will not be affected by proposed changes to rule for financial responsibility because state and federal facilities are self-insured and have sufficient assets to assure proper closure and are therefore exempt from such requirements in both state and federal rules.

### **Proposed Rule Revisions and Rationale**

#### **WAC 173-303-040 Definition – Recycling unit**

Rationale - In order to implement new rules for recyclers and used oil processors/re-refiners, Ecology considered applying existing requirements for TSD units to equipment and structures that are used to reclaim, reuse or recycle hazardous wastes or process used oil. Ecology's determination was that applying existing terms like "dangerous waste management unit" and "regulated unit" was not appropriate because these terms have specific meanings and applications in the existing rules for dangerous waste permits. A new term, "recycling unit" is proposed because it will apply to equipment, structures and land that are not subject to dangerous waste permits. The department considered using the term "resource reclamation unit". This term is not proposed in this action because it may be construed too narrowly to mean only waste processes in which recyclable materials are actually reclaimed, and not used or reused.

A concern was expressed (EPA Region 10 - Seattle) that regulated TSDs may use the newly created term "recycling unit" to avoid permitting and TSD storage requirements. Ecology considered this concern and decided that the department retains the authority to make decisions on units that are subject to dangerous waste permitting when they are used for treatment, storage or disposal. In addition, Ecology retains the authority to

require permits, on a case-by-case basis for recycling processes that pose a threat to human health and the environment (ref. WAC 173-303-120(4)). When a permit is required by Ecology, the department has the authority under WAC 173-303-800(8) to establish terms and conditions necessary to protect human health and the environment.

### **WAC 173-303-120(3) Requirement for Recyclers to Prepare and Update Closure Plans**

Rationale - Recycling poses potential and actual threats to human health, the environment and the economic well being of property owners, customers and taxpayers of Washington State. Recycling processes are subject to operating and minimum closure standards in the Dangerous Waste Regulations. These regulations state that, upon closure of their operations, facility owners and operators must remove wastes and decontaminate equipment and structures. However, recyclers are exempt from dangerous waste permitting, including requirements to prepare detailed closure plans, provide pollution liability coverage (protection for claims of damage to third parties), and to plan and pay for the orderly and safe closure of their facilities (financial assurance). In its report to the Legislature (WDOE 02-040-028, September 2002), Ecology documented a number of facilities that closed, underwent bankruptcy or simply abandoned their operations and left the burden and cost of waste removal and cleanup to state or federal agencies, with the potential for cost recovery from property owners or former customers. Additional sites are identified and information is provided on costs and the status of cleanup in a separate report prepared for the department (Ross & Associates, "Analysis of Cleanup Obligations and Costs for Hazardous Waste Management Facilities in Washington State", January 2003; publication #03-04-011; <http://www.ecy.wa.gov/biblio/0304011.html> ).

Ecology is proposing to extend requirements to prepare closure plans, obtain pollution liability coverage, and demonstrate financial assurance for closure to recycling facilities. This will provide site specific plans for how to properly close and decontaminate equipment and structures used for waste processing, provide coverage for claims of damage from waste releases or discharges to third parties, and financial resources to pay for closure.

**This applies to recyclers of state-only dangerous waste, materials used in a manner constituting disposal, CFC/HCFC refrigerants, dangerous wastes burned for energy recovery, spent lead-acid batteries, precious metal reclamation, and spent antifreeze.** This new requirements applies to facilities that receive wastes from off-site for recycling. **It does not apply** to on-site recycling facilities, such as a generator that recycles spent solvents in an on-site distillation unit. It also does not apply to facilities like city or county operated household hazardous waste or exempt small generators facilities, transporters or 10 day transfer operations.

Ecology considered applying post-closure financial assurance requirements of TSDs to recyclers and used oil processors/re-refiners. Our proposal does not include post closure financial assurance because it may create additional administrative burden and expense. If cleanup of soil or ground water is necessary, it will be accomplished through the cleanup authority and provisions of the Model Toxics Control Act (Ch. 70.105D RCW).

Ecology also considered an option for these rules that involved establishing a maximum closure fund of \$50,000 which could be lower if justified by a facility through a detailed closure cost estimate. This option also did not include the requirement for obtaining pollution liability coverage in the amount of \$1 per occurrence, \$2 million aggregate. This option is not included in this proposal. Many stakeholders preferred the added economic protection offered through the proposed rules that require facility owners/operators to obtain pollution liability coverage and financial assurance for closure in an amount established through an approved facility specific closure cost estimate.

### **WAC 173-303-120(4) Recyclers who do not store – time to enter recyclable materials into active process.**

Rationale - The provision of this section of the Dangerous Waste Regulations has traditionally been referred to as the “immediate recycler” exemption from permitting. A similar provision exists in federal rules under 40 CFR Part 261.6(c). Facilities may conduct recycling without a permit if wastes are not stored prior to entering them into an active recycling process. Federal hazardous waste rules do not contain the 24-hour specification, nor do they define “storage” or “recycling without storage”. EPA acknowledges that there is no defined “holding time” for wastes prior to recycling. Decisions are allowed on a site specific basis or through state rules (for example, 24 hours; see M. Straus to J. Johnson, 03/27/89; J. Denit to F. Prasil, 09/01/93).

In the current Dangerous Waste Regulations, Ecology chose to more specifically define ‘recycling without storage’ by requiring facility operators to place recyclable materials into the active recycling process (WAC 173-303-120(4)) within 24 hours of receipt. Our proposal to revise this rule to allow up to 72 hours is based on:

- In the past two or three years, Ecology has developed clear and consistent requirements for recyclers involving time limits for waste receipt, check-in, tracking and the point at which wastes are placed into active recycling. Rather than revert to more vague interpretations of these procedures in order to achieve the desired level of flexibility, Ecology prefers to provide a clear regulatory standard (72 hours) for staging wastes.
- There will be no substantive reduction of environmental protection. Staging of wastes will remain subject to manifesting, employee training, containment and container & tank management standards of large quantity generators and TSDs.
- New requirements for closure and financial responsibility proposed by Ecology will enhance standards and reduce overall liability at these operations.
- The additional time period for qualifying recyclers will provide flexibility and efficiency for recycling operations, thereby encouraging more recycling of wastes and reducing operating costs.
- As discussed above, this proposal does not violate any existing statutory or regulatory requirement of federal statutes or regulations.

Ecology is also considering allowing TSDs additional time for manifested shipments of waste to remain in a “waste receiving area” before transferring to a permitted unit. The department’s decisions on the appropriate length of time for wastes to be held in waste receiving areas are made on a site-specific basis and will be specified in the hazardous waste permits issued to the facility owners/operators.

#### **WAC 173-303-120(4)(c) Requirement for Recyclers who do not store to prepare and update closure plans, provide financial responsibility (liability and closure)**

Rationale - This proposal is necessary to apply closure and financial responsibility requirements to off-site recycling facilities. For the reasons discussed earlier in this proposal, this revision adds requirements for closure plans, liability coverage, and closure funding to recyclers who do not store, and deletes the current exemption in subsection (c)viii.

#### **WAC 173-303-515(9) Standards for Management of Used Oil - Processors & re-refiners subject to closure, liability coverage and closure funding**

Rationale - Used oil processing/re-refining poses potential and actual threats to human health, the environment and the economic well being of property owners, customers and taxpayers of Washington. In its report to the Legislature (WDOE 02-040-028, September 2002), Ecology documented a number of facilities that closed, underwent bankruptcy or simply abandoned their operations and left the burden and cost of waste removal and cleanup to state or federal agencies, with the potential for cost recovery from property owners or former customers. Additional sites are identified and information is provided on costs and the status of cleanup in a separate report prepared for the department (Ross & Associates, “Analysis of Cleanup Obligations and Costs for



Hazardous Waste Management Facilities in Washington State”, January 2003; publication #03-04-011; <http://www.ecy.wa.gov/biblio/0304011.html> ).

Existing standards for used oil processors/re-refiners (Part 279.54(h) incorporated by reference in WAC 173-303-515) require used oil processors to remove all wastes and decontaminate structures and equipment at the time of closure. Used oil processors/re-refiners are exempt from dangerous waste permitting, including requirements to prepare detailed closure plans, provide pollution liability coverage (protection for claims of damage to third parties), and to plan and pay for the orderly and safe closure of their facilities (financial assurance).

Through this rule, Ecology considered but did not adopt post-closure financial requirements because it may create additional administrative burden and expense. If additional cleanup of soil or ground water is necessary, it will be accomplished through cleanup authority and provisions of the Model Toxics Control Act (Ch. 70.105D RCW). Under existing regulations, these used oil operations do not have a dangerous waste permit that requires consideration for post-closure care.

#### **WAC 173-303-610(1) Closure rule includes recycling facilities and/or recycling units**

Rationale - This proposed rule clarifies that recycling units are subject to closure plans and financial responsibility requirements.

#### **WAC 173-303-610(12) Closure rule includes recycling and used oil processing/re-refining**

Rationale - A new subsection is created to establish the requirements for preparation and use of closure plans for off-site recycling and used oil processing/re-refining facilities. This new subsection is needed because the current rules for closure plans are predicated on the submittal of a hazardous waste permit application. The new subsection relies on existing closure procedures, when possible. For example, by referencing disposal or decontamination procedures in WAC 173-303-610(3), the department intends the owner and operator of a “recycling unit” that includes container areas or tank systems to follow procedures outlined in WAC 173-303-630(10) and -640(8), respectively.

The department anticipates that existing guidelines for the preparation of closure plans for dangerous waste management unit will also apply to the closure plans for recycling units. The “Guidance for Clean Closure of Dangerous Waste Management Facilities”, WDOE 94-111 are available upon request from the department. These are also available on-line at <http://www.ecy.wa.gov/biblio/94111.html> .

#### **WAC 173-303-620(1) Financial Responsibility - Applicability**

Rationale - This section establishes the financial responsibility requirements for off-site recyclers and used oil processors.

WAC 173-303-620(3)(a)(iii) does not allow facility owners/operators to include the salvage value of wastes, equipment or structures when preparing the facility closure cost estimate. The department seeks input on this issue regarding whether it should apply to recyclable materials and recycling units. In considering this issue the department recognizes that recyclable materials (e.g., spent solvents, on-specification used oil) may be relatively easier to sell than other types of dangerous wastes. On the other hand, if a recycling or used oil processing facility undergoes bankruptcy or is abandoned, the materials remaining on-site may not be recyclable as claimed and must be sampled, tested, and properly disposed.

#### **WAC 173-303-620(4) Financial Responsibility - Financial mechanisms**

Rationale: In evaluating issues of financial assurance for closure, the department applied a fairly simple concept – what is the level of confidence that the funds needed to pay for closure (based upon an approved

closure cost estimate) will be available in the event that the facility owner/operator is absent or otherwise not cooperative?

The department identified several problems with regulatory requirements for closure and financial responsibility in its report to the Legislature (September 2002, WDOE 02-04-028). Options for addressing gaps and areas of inadequate or out-of-date requirements were identified and discussed with stakeholders. Several options were obtained from work by the Office of the Inspector General, US EPA, EPA's proposed rule for standardized permits for storage and treatment facilities, review of programs in other states, the Association of State and Territorial Solid Waste Management Organizations (ASTSWMO), a consultant to Ecology, discussions with other states, and Ecology staff.

#### Revisions to Financial Mechanisms

Facilities subject to financial responsibility requirements of WAC 173-303-620 may provide liability coverage and closure/post-closure assurance through one or a combination of the following mechanisms:

Trust Fund

Surety Bond (payment or performance)

Letter of Credit

Insurance

Financial Test/Corporate Guarantee

There are currently eleven active TSDs located in Washington that must demonstrate financial responsibility (state and federally owned facilities are exempt from financial requirements). The types of financial mechanisms selected by these facilities are shown in Table 1, below.

Facility	Liability Mechanism	Closure/Post-Closure Mechanism
Energy NW, APEL	Suspended until 1 <sup>st</sup> customers	Suspended until 1 <sup>st</sup> customers
Emerald Services	Insurance	Letter of Credit
PacificEcoSolutions	Insurance	Insurance
Philip/BEI Kent	Insurance	Insurance
Philip/BEI Tacoma	Insurance	Insurance
Univar	Insurance	Surety Bond
Alcoa Ferndale	Corporate Guarantee	Corporate Guarantee
Boeing Auburn	Financial Test	Financial Test
Goldendale Aluminum	Insurance	Trust Fund
Noveon	Insurance	Letter of Credit
Reichhold Chemical	Not provided	Letter of Credit

#### Partially Funded Trust Fund

State and federal rules allow the use of trust funds as a financial mechanism for pollution liability coverage and closure funding. Trust funds are a very reliable source of funding because a dedicated fund is established at a financial institution in the amount of the closure cost estimate. The department may access these funds in the event of abandonment, bankruptcy or lack of cooperation by the facility owner/operator.

Up to now, Washington has adopted the federal approach of allowing facility owners/operators to build up the trust fund for closure over time (maximum 10 years). This allowance is often called a 'partially funded trust fund' and is provided through 40 CFR 264.143(a)(3). The department has determined that partially funded trust funds, (except for recycling units, as discussed below), do not provide adequate financial assurance for closure or pollution liability. We are, therefore, proposing to delete this type of mechanism from WAC 173-303-620(4). Following adoption of this proposed rule, any new TSDs that seek to use the trust fund as a financial



mechanism will need to assure the trust is fully funded at the time of permit application, or when transferring from another financial mechanism to a trust fund.

In creating new requirements for financial responsibility for recycling and used oil processing facilities, the department recognized that existing facilities that wish to use the trust fund as a financial mechanism may require additional time to build up the trust fund. The department is proposing in WAC 173-303-620(4)(12)(c)(i) to allow existing facilities seeking to use the trust fund up to three years after the date of the department's approval of the closure plan to place the full amount of the closure cost estimate into the trust fund. If the department does not approve a closure plan within one year of its submittal, the department may determine a closure cost estimate and require the facility to begin paying into a fund for financial assurance. This assumes the department has reviewed and commented on a draft closure plan, but the facility has not responded with a final closure plan that meets the regulatory requirements within the first year. This also assumes that the department does not have justification for denying the closure plan outright pursuant to WAC 173-303-610(12)(ii).

#### Performance Surety Bond

One financial mechanism that is allowed through state and federal rules is the use of a bond that guarantees that closure activities will be performed and paid for by the financial institution holding the bond. No facilities in Washington are currently using this mechanism. While the concept appears to be valid (end result is clean closure of facilities according to regulatory and permits requirements) it is complex and difficult for facilities to maintain and for the department to administer. As a result, the department is proposing to delete this mechanism from WAC 173-303-620.

#### Captive Insurance

Captive insurance occurs when a corporation creates a subsidiary insurance company that provides insurance solely to other companies owned, or held in majority ownership, by the same parent corporation. The Office of Inspector General audit report on RCRA financial assurance (RCRA Financial Assurance for Closure and Post-Closure; 2001-P-007; March 30, 2001) identified the use of "captive insurance" as a problem, as follow:

We believe that insurance policies issued by a "captive" insurance company do not provide an adequate level of assurance because we found no independence between facility failure and failure of the mechanism. Most captive insurance companies are "pure" captives, wholly owned subsidiaries controlled by the parent company or its other subsidiaries. (page 12).

The OIG report considers captive insurance to be a form of self insurance.

While it appears that no facilities in Washington are currently relying on captive insurance, the department wants to take this opportunity of revising the rules dealing with financial responsibility to define and delete captive insurance as an acceptable financial mechanism. Comments are invited on this proposal.

#### Minimum Ratings for Insurance Companies

Recent experience with a national waste management company whose insurance company declared bankruptcy resulted in the department's proposal to require insurance companies to meet minimum ratings as established by Moody's, Standard & Poor's or A.M. Best. This proposal is based upon the same approach made by EPA in its proposed rule for standardized permits and financial responsibility (Federal Register; October 12, 2001; page 522371). This proposal will provide a high level of confidence that insurers will have sufficient financial strength to pay claims against pollution liability coverage or closure/post-closure insurance, as applicable.

#### Financial Test and Corporate Guarantee

As with other financial mechanisms for closure/post-closure, the department has adopted, by reference, federal rules allowing facility owners/operators to demonstrate that they have sufficient financial resources to pay for closing their dangerous waste management units (see WAC 173-303-620(4)(b)). This demonstration of sufficient financial resources is made by passing the financial test and corporate guarantee (see 40 CFR Part 264.143(f)).

The current financial test and corporate guarantee requires the facility owner/operator or parent corporation to pass one of the following alternative sets of conditions:

- a) a specific level of assets to liability; and a net working capital and tangible net worth at least six times the total current closure and post-closure cost estimate; and a tangible net worth of at least \$10 million; and a specified level of assets in the U.S., or
- b) levels of assets similar a), above, (including the \$10 million in tangible net worth), plus a specified bond issuance rated by Standard and Poor's or Moody bond rating services.

These demonstrations must be updated annually and must be accompanied by independent financial reports and certifications. Typically, only large corporations qualify to use the financial test and corporate guarantee.

The financial test and corporate guarantee rule was first adopted by EPA in 1981 and has not been updated since. The department has reviewed the use of the financial test and corporate guarantee for two active facilities. A number of other facilities in Washington that have inactive or closed TSDs are also using the financial test or corporate guarantee to satisfy financial requirement for closure or post-closure. These facilities have not yet completed final closure, post-closure or corrective action.

In this proposal, the department is seeking to increase the level of tangible net worth in the financial test and corporate guarantee to \$20 million. This level is adjusted due to inflation since 1981 (based on national inflation factor of approximately 1.8 for 1981 to 2003). Increasing the level of tangible net worth to reflect inflation alone will provide a higher level of confidence that facility owners/operators selecting this financial mechanism will have sufficient resources to pay for facility closure.

#### **WAC 173-303-620(6) Financial assurance for post-closure monitoring and maintenance**

Rationale - Although the proposed revisions to this section do not address requirements for recycling or used oil processing/re-refining facilities, the department is taking this opportunity to make financial assurance for post-closure monitoring and maintenance for TSDs consistent with the proposed changes to financial assurance for closure. The rationale for these proposed revisions is the same as that applied to change in closure, above.

#### **WAC 173-303-620(8) Liability Requirements**

Rationale: Please refer to the discussion on financial assurance for closure, above, for the rationale applied to proposed revisions addressing captive insurance, ratings of financial institutions, and tangible net worth.

The department is proposing to clarify that it may file a claim against pollution liability insurance as a damaged third party when ground water is detrimentally impacted due to releases or discharges of dangerous wastes or used oil from recycling units. Groundwater is a component of "waters of the state" for which the department is granted jurisdiction (see RCW 90.48.020 and 030). This clarification will allow the department to recover all, or a portion of, the costs of cleanup in the event that a facility owner/operator does not take appropriate remedial action when groundwater is contaminated as a result of a release or discharge from a covered recycling unit.

#### **WAC 173-303-960 Authority for department to seek injunctive relief**

Rationale – This proposed rule will allow Ecology to seek a court order (for example, a temporary restraining order to stop a facility from receiving additional wastes from off-site) prior to conditions deteriorating to

“imminent and substantial threat” thresholds of the current WAC 173-303-960, and in some situations, prior to issuance of civil orders or penalties. This proposed rule will make the Dangerous Waste Rules consistent with the powers granted the department and the attorney general in the State Hazardous Waste Management Act, RCW 70.105.120.

There have been two recent situations where a used oil processor and a recycling facility continued to receive wastes from off-site in the face of enforcement actions by the department. The companies continued to receive revenues from the wastes received, but did not incur the costs of waste recycling and disposal. Threats to health and the environment were exacerbated, but did not reach the “imminent and substantial” threshold for quite some time.

Decisions on when to apply this authority will be based on consideration of factors involved with specific cases.

The revision addressed in this proposal was previously presented to stakeholders as a new subsection in rules for recycled, reclaimed and recovered wastes, WAC 173-303-120. This proposal deletes that previous recommendation and applies it through a simpler approach by amending WAC 173-303-960.